CST 361/408 Deep Learning Algorithms Tu, Th 2:00pm-3:15pm, AUD 516

Spring 2022 **HW 2**

Exercise 1: Ch. 3. ex 2 (1 pts).

Exercise2 (4pts). In lecture 2-1 slides 6-13 we computed weight updates by back propagation on a given training instance. Suppose that for the same ANN (i.e. the one that is given on slide 6 with the weights initialized as on this slide) we are given different training instance $(\vec{x}, y) = \begin{bmatrix} 0.82 \\ 0.23 \end{bmatrix}$, 0]. What would be the updates in this case? Show your computations (i.e. formulas that you are using and which values you are subbing there)

- a.) forward computations (1pt)
- b.) backward propagation (3pts 1 pt. per layer)